

**A NEW SPECIES OF *AURATONOTA*  
(LEPIDOPTERA: TORTRICIDAE) FROM  
DOMINICA, WEST INDIES**

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*Abstract.* — *Auratonota dominica* J. W. Brown, NEW SPECIES, from Dominica, West Indies, is described and figured. The new species is most similar to *A. aenigmatica* (Meyrick) and *A. dispersa* J. W. Brown, from which it can be distinguished superficially by the wider transverse fasciae and darker ground color of the forewing, and genitally by the club-shaped uncus with fine setae from the venter, and the free, thornlike process from the sacculus. Because the genus is defined primarily by symplesiomorphies of the male genitalia, *Auratonota* Razowski, as currently circumscribed, probably is not monophyletic. *Auratonota dominica* is only the second species in the tortricid tribe Chlidanotini documented from the Antilles; the other is the widespread “*Conchylis*” *tricesimana* Zeller, previously recorded from Jamaica.

*Key Words.* — Insecta, Lepidoptera, Chlidanotini, Caribbean, *Auratonota dominica*, taxonomy

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*Auratonota* Razowski includes six previously described species confined to the New World tropics (Razowski 1987, Brown 1990). Members of the genus are phenotypically diverse; the group is characterized primarily by symplesiomorphies of the male genitalia. Although it is likely that *Auratonota* is para- or polyphyletic, limited knowledge of Neotropical Chlidanotini has inhibited elucidation of phylogenetic relationships among described genera and species. The discovery of a new species from the island of Dominica in the Lesser Antilles represents the second species of the tortricid tribe Chlidanotini from the Caribbean. The other is the widespread “*Conchylis*” *tricesimana* Zeller, which is known from Jamaica (NMNH specimens).

*Depositories, Procedures, and Abbreviations.* — Taxonomic material for this study was borrowed from the National Museum of Natural History, Washington, D.C. (NMNH). Dissection methodology followed that presented by Powell (1964). Terminology for wing venation and genitalic structures follows Horak (1984): FW = forewing; HW = hindwing; DC = discal cell.

***AURATONOTA DOMINICA* BROWN, NEW SPECIES  
(Figs. 1–3)**

*Types.* — Holotype, male, deposited in U.S. National Museum of Natural History, Washington, D.C., data: (WEST INDIES.) DOMINICA. 2.8 km (1.7 mi) E of Point Casse, 24 Mar 1965, light trap, W. Wirth (NMNH). 2 male, 9 female paratypes as follows: (WEST INDIES.) DOMINICA. Point Casse: 1 male, 2 females, 12–14 Oct 1964; 1 female, 23 Nov 1964; 1 male, 27–30 Nov 1964, all Bredin-Archibold-Smithsonian Biol. Surv. Dominica (all P. Spangler, NMNH); 0.6 km (0.4 mi) E of Point Casse: 1 female, 6 May 1964 (O. Flint, NMNH); 3.3 km (2 mi) NW of Point Casse: 1 female, 20 May 1965 (D. Davis, NMNH); Freshwater Lake: 3 females, 5 Nov 1966; 1 female, 8 Nov 1966 (E. Todd, NMNH).



Figure 1. Female paratype of *Auratonota dominica*.

*Description.*—*Adult Male.* FW length 7.0–7.6 mm ( $\bar{x} = 7.2$ ;  $n = 3$ ). *Head:* Scaling on frons yellow-gold, sparse and smooth below mid-eye, dense and roughened above. Maxillary palpus inconspicuous. Labial palpus moderately long, weakly upturned, white-ocherous to yellow-gold mesally, brown and gold-brown laterally; segment II expanded distally by scaling; segment III approximately one-third as long as II, exposed, smooth-scaled. Ocelli present, small. Chaetosema with few setae. Antenna gold-brown, thick, laterally compressed; sensory cilia inconspicuous. *Thorax:* Smooth-scaled, shiny white-ocherous, tegulae brown. Legs unmodified, without tibial hairpencil; apical and preapical spines on fore-tarsomeres inconspicuous. *Forewing:* Ground color pale yellow-gold overlaid with diffuse light brown and gray-brown scaling; 3 well-defined, transverse, brown fasciae from costa to dorsum: 1 in subterminal region, moderately uniform in width, with yellow overscaling between 0.6–0.8 from costa to dorsum; 1 from costa about 0.55–0.75 from base, attenuate immediately below DC and overscaled there with yellow-gold, divided at costa by small, irregular, yellow-gold spot; 1 from costa about 0.4–0.5 from base, obsolete immediately below DC; moderate, brown, basal patch at costa. Entire surface rather shiny, but metallic scales absent. Fringe checked gray-brown and white-ocherous. *Hindwing:* Unicolorous light tan. Fringe white-ocherous. *Abdomen:* Dorsal pits and hairpencil absent. *Genitalia:* As in Fig. 2 [drawn from NMNH slide no. 96331 and JWB slide no. 345 (NMNH);  $n = 2$ ]. Uncus club-shaped, with fine setae from venter of distal one-third. Hami slender, weakly undulate. Socii elongate, digitate, with long, fine setae; closely associated with, but free from hami. Gnathos poorly-defined. Transtilla a broad, arched band, contiguous with anellus laterally. Valva broad, nearly uniform in width, rounded apically; faint longitudinal invagination in basal one-fourth of costa; sacculus undulate, broadest subbasally, confined to basal one-third of valva, with free, short, blunt, subapical, thornlike process extending perpendicular to venter of valva. Saccus-vinculum complex large, weakly attenuate distally. Aedeagus simple, straight, unmodified; cornuti absent.

*Adult Female.*—FW length 7.3–8.5 mm ( $\bar{x} = 7.8$ ;  $n = 9$ ). As described for male, except antenna more slender. *Genitalia:* As in Fig. 3 [drawn from JWB slide no. 346 (NMNH);  $n = 2$ ]. Papillae anales with unusually developed mesad ventral portion. Apophyses slender, posteriores approximately two-thirds as long as anteriores. Dorsum of VIII with sparse, strong, spine-like setae. Sterigma a simple ring; anterior edge narrowly sclerotized, with wide, shallow depression immediately posterad of ostium. Corpus bursae irregularly round-triangular; signum a patch of curved spines of variable length and a patch of sclerotized dimples. Accessory bursa long, frail, from elongate, narrow ductus originating slightly anterad of signum. Ductus seminalis from near junction of ductus and corpus bursae.

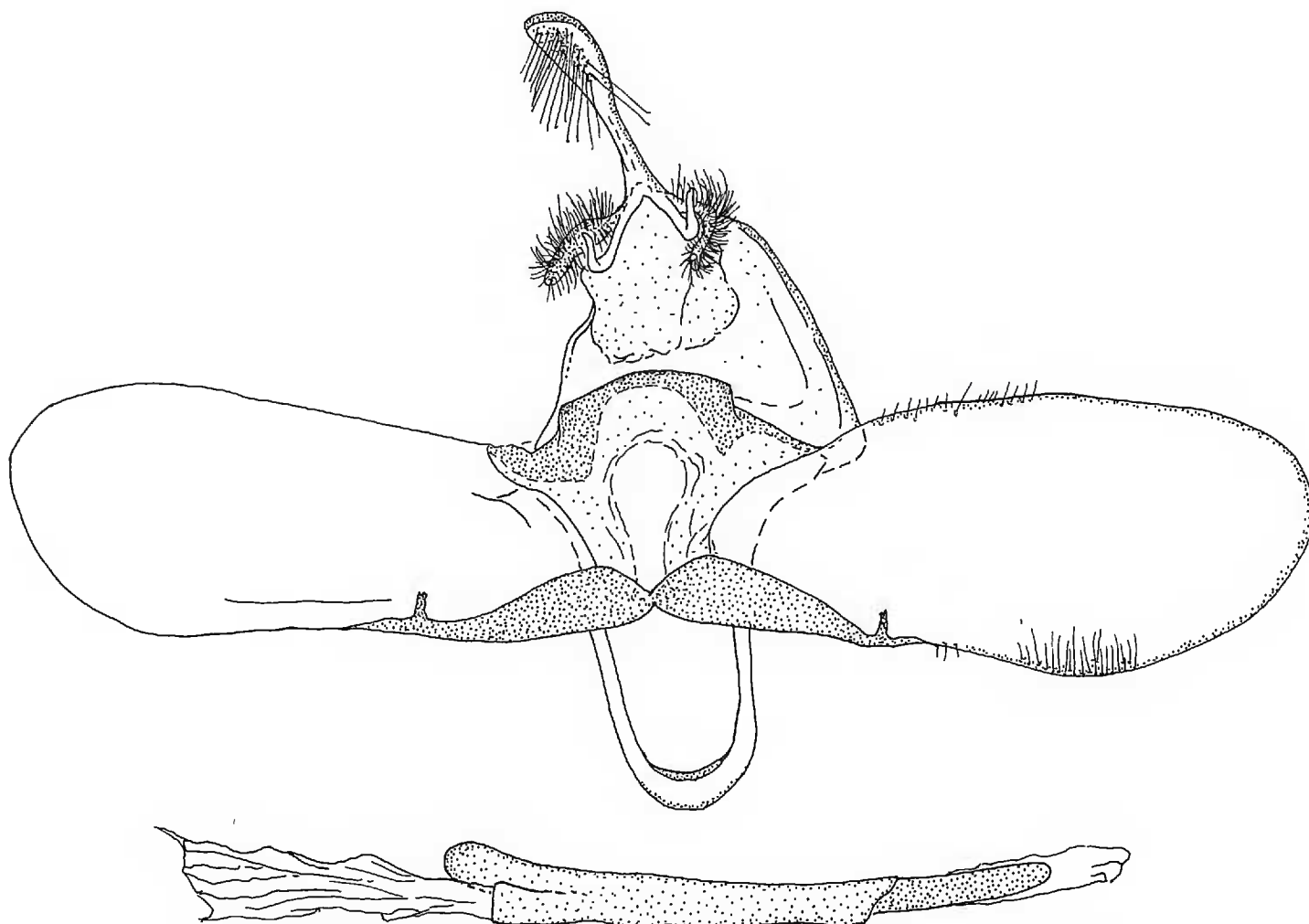


Figure 2. Male genitalia of *Auratonota dominica*; valvae spread, aedeagus removed.

*Diagnosis.*—*Auratonota dominica* NEW SPECIES can be distinguished from *A. aenigmatica* (figured in Clarke 1958: 116) and *A. dispersa* (figured in Brown 1990: 155) by the broader, undivided, more uniform transverse fasciae of the forewing, darker ground color, and overall more somber appearance. The male genitalia are easily distinguished from the latter two by the club-shaped uncus and short, thornlike process of the sacculus. Although the forewing pattern of *A. dominica* is reminiscent of some species of *Monortha* Razowski and Becker [e.g., *M. illaqueata* (Meyrick)], the male genitalia are not similar to members of this genus. The male genitalia of *Monortha* have large spine-like setae from the venter of the uncus and from the socii; in addition, the socii are short and fused to the hami.

*Discussion.*—The seven described species of *Auratonota* make up three fairly distinct groups on the basis of facies, in part correlated with male genitalia form. *Auratonota petalocrossa* (Meyrick), *A. hydrogramma* (Meyrick), and *A. aporema* (Dognin) are large (FW length 11.0–17.0 mm), mostly dark-colored species. *Auratonota aurantica* (Busck) is medium-sized (FW length 9.0–11.0 mm) with a nearly uniform shiny gold forewing. *Auratonota aenigmatica* (Meyrick), *A. dispersa* Brown, and *A. dominica* are small (FW length less than 9.0 mm) with a pale ground color and darker transverse forewing fasciae. In the former two groups the valvae are broadest subapically and narrowest basally; in the latter group the valvae are more nearly uniform in width.

*Material Examined.*—See types.



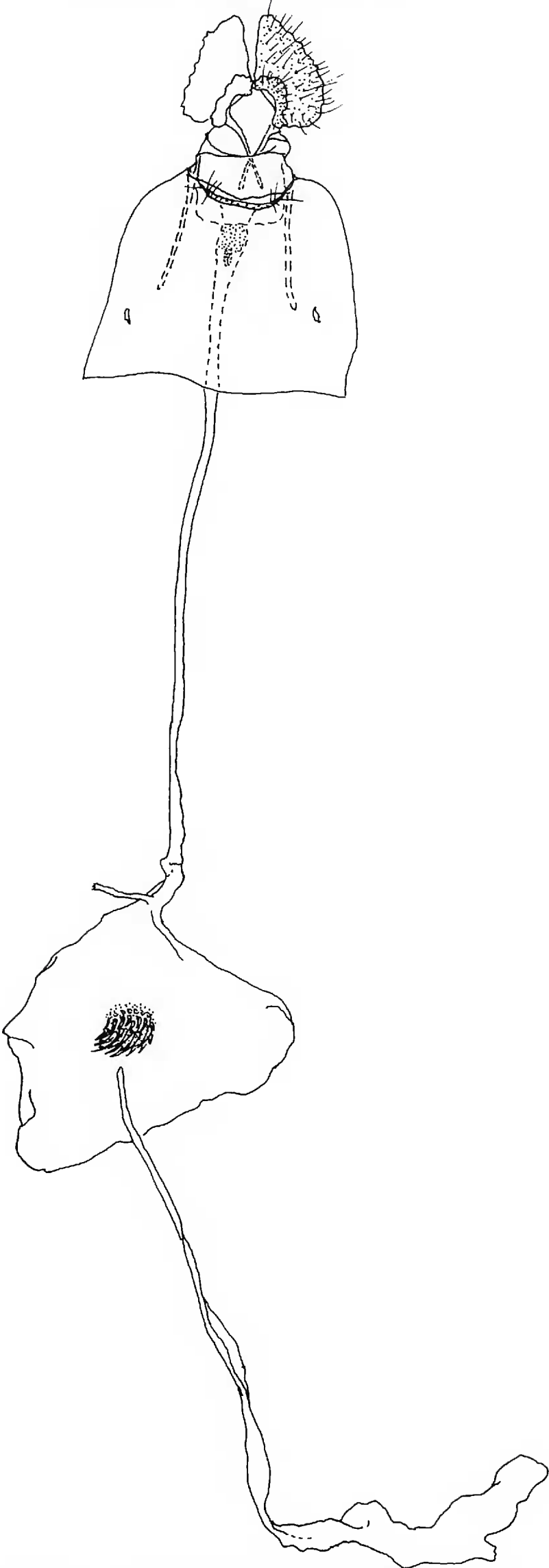


Figure 3. Female genitalia of *Auratonota dominica*.

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